

## ABSTRACT OF THE DISCLOSURE

Method and apparatus for measuring a distribution of emissivity on a surface of an object body, on the basis of a light emitted from the surface of the object body, wherein a temperature of the object body at each picture element of its image is calculated on the basis of a radiant intensity ratio at each pair of corresponding picture elements of a first image and a second image which are obtained with respective two radiations of respective first and second wavelengths selected from the light emitted from the surface of the object body, to measure a distribution of the temperature on the surface of the object body, and an emissivity value at each picture element of the image of the object body is calculated on the basis of the measured distribution of the temperature, and according to a predetermined relationship between the temperature and the emissivity value.